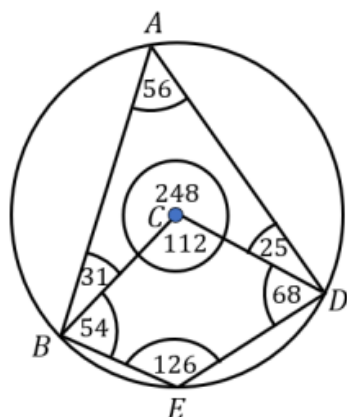


(8) Mixed Problems

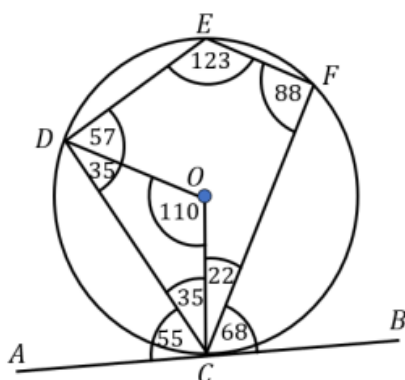
Do now: Angle notation



Write down the size of the following angles:

- | | |
|-----------------------------------|------------------|
| (a) $\angle ABC$ | (b) $\angle BED$ |
| (c) $\angle BAD$ | (d) $\angle EDC$ |
| (e) $\angle CDA$ | (f) $\angle EBA$ |
| (g) the obtuse angle $\angle DCB$ | |
| (h) the reflex angle $\angle DCB$ | |

- (a) 31°
 (b) 126°
 (c) 56°
 (d) 68°
 (e) 25°
 (f) 85°
 (g) 112°
 (h) 248°



Write down the size of the following angles:

- | | |
|------------------|------------------|
| (a) $\angle DEF$ | (b) $\angle CFE$ |
| (c) $\angle OCD$ | (d) $\angle DCA$ |
| (e) $\angle BCF$ | (f) $\angle OCA$ |
| (g) $\angle DCB$ | (h) $\angle EDC$ |

- (a) 123°
 (b) 88°
 (c) 35°
 (d) 55°
 (e) 68°
 (f) 90°
 (g) 125°
 (h) 92°

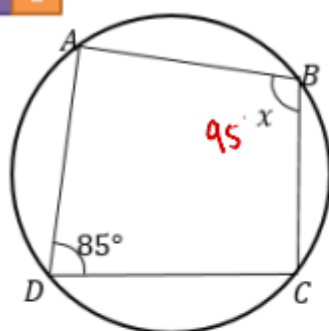
From memory list the circle theorems with diagrams.

Mixed Circle Theorems with Tangents				
(a)	(b)	(c)	(d)	
Find the size of angle ABD 75°	Find the size of angle EBA 43°	Find the size of angle ABC 64°	Find the size of angle BED 55°	
(e)	(f)	(g)	(h)	
Find the size of angle DEF 116°	Find the size of angle BCD 47°	Find the size of angle DBC 66°	Find the size of angle ABE 29°	
(i)	(j)	(k)	(l)	
Find the size of angle ADC 128°	Find the size of angle EDC 91°	Find the size of angle DBC 73°	Find the size of angle FEB 25°	

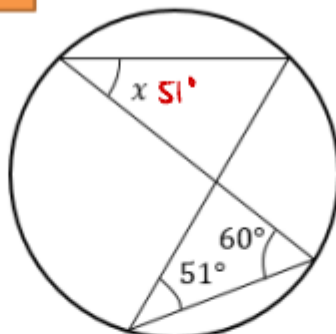
Mixed Problems

Mixed Problems

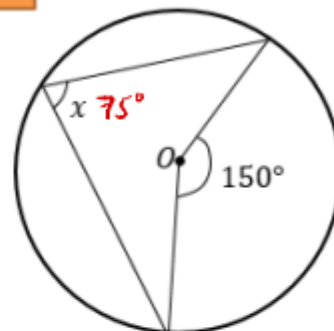
1 a



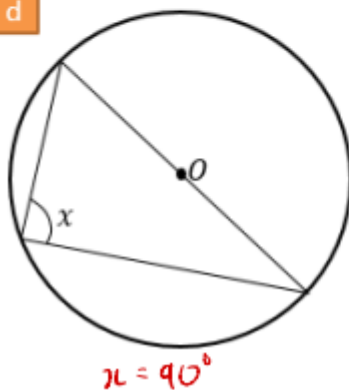
b



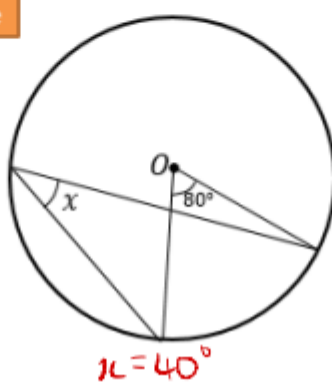
c



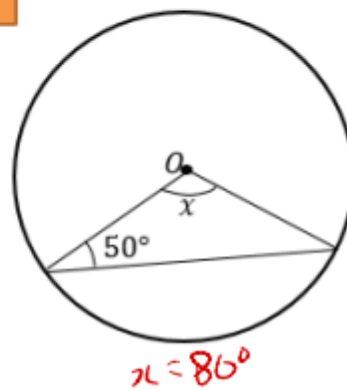
d



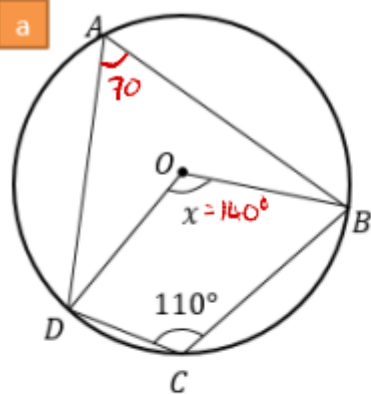
e



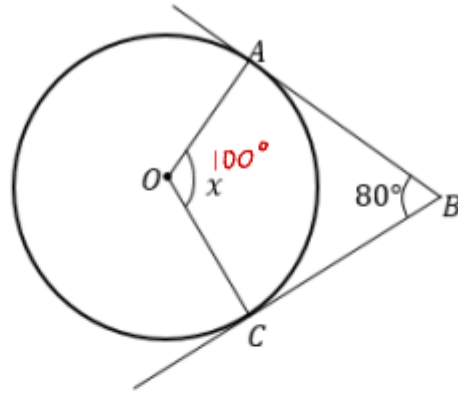
f



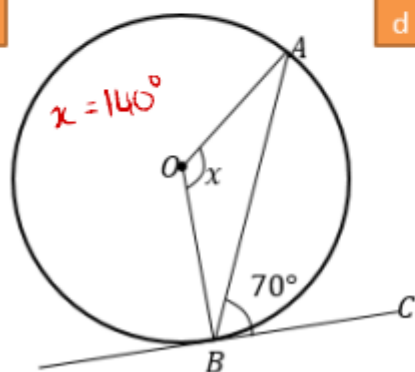
2 a



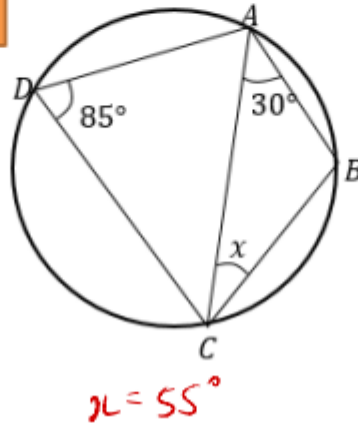
b



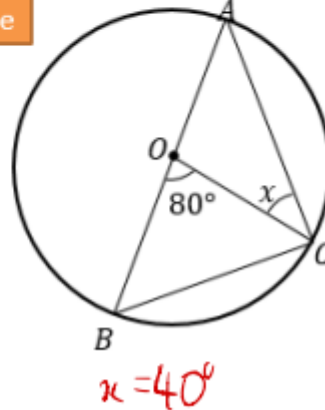
c



d

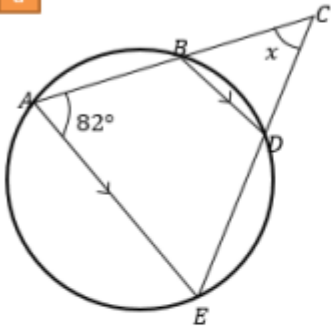


e

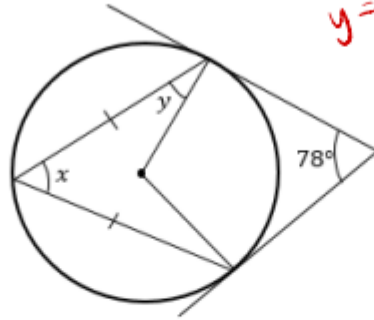


$$x = 16^\circ$$

3 a



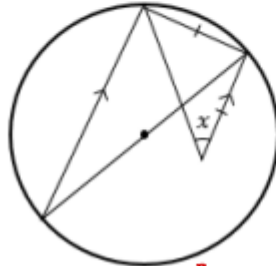
b



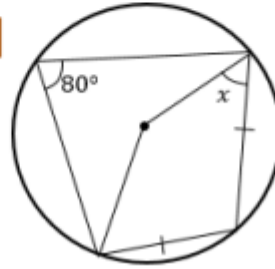
$$x = 51^\circ$$

$$y = 25.5^\circ$$

c



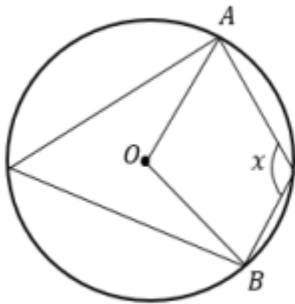
d



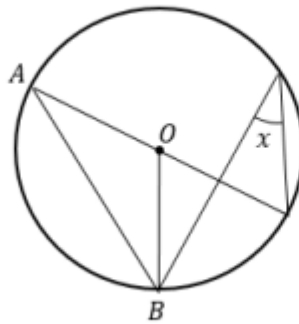
$$x = 50^\circ$$

$$x = 45^\circ$$

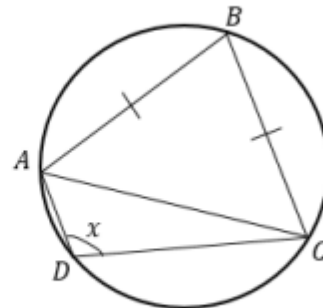
4 Determine each indicated angle in terms of x .



$$\angle AOB = 360 - 2x$$

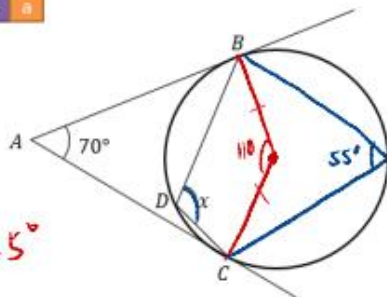


$$\angle AOB = 180 - 2x$$



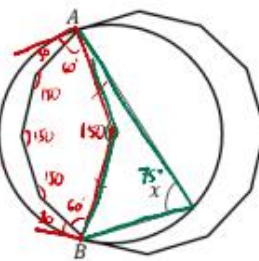
$$\angle BAC = \frac{1}{2}x$$

5 a

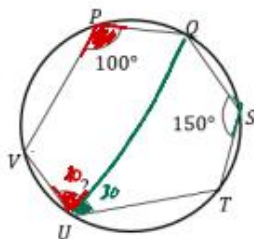


$$x = 125^\circ$$

b



c



$$x = 110^\circ$$